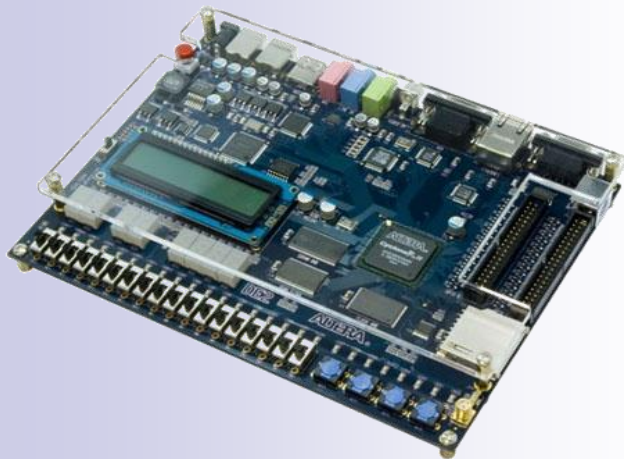


# Logic Systems and Processors

*cz:Logické systémy a procesory*



*Version 1.0*

# Lecturer

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([susta@fel.cvut.cz](mailto:susta@fel.cvut.cz)), +420 2 2435 7359



Shibboleth.

**FEL**id

<https://dcenet.felk.cvut.cz/fpga/>

-> login FELid

<http://dcenet.felk.cvut.cz/>

<http://dcenet.felk.cvut.cz/edu/fpga/>

*<-Installations and guides – no login*

Moodle: <https://moodle.fel.cvut.cz/course/view.php?id=5164>

**DCENET = Department of Control Engineering NETWORK**

# Literature

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## Lectures + practical exercises

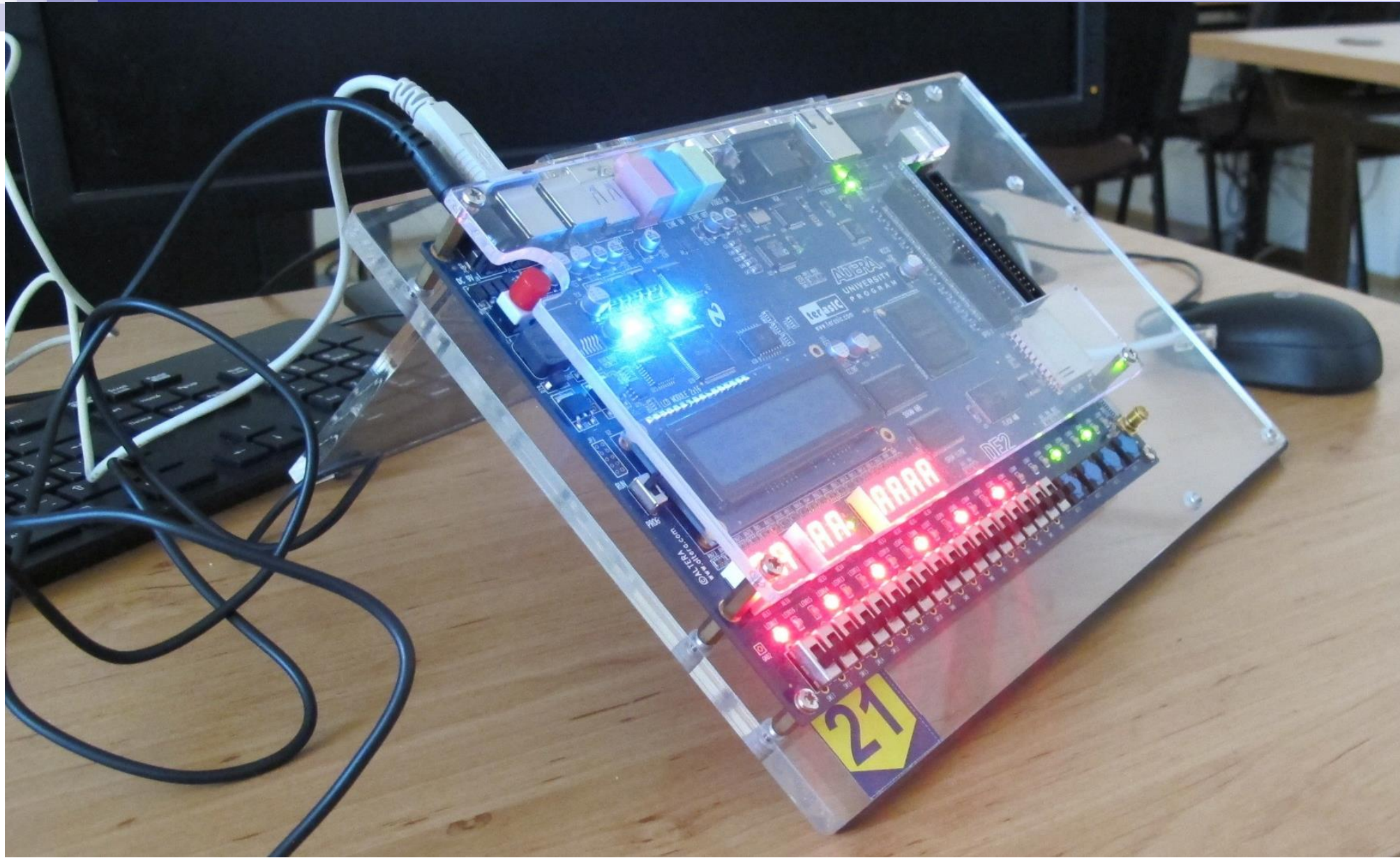
<http://dcenet.felk.cvut.cz/edu/fpga/guides.aspx> (*public site*)

- Šusta, R.: [APOLOS prerequisite](#) V1.1, ČVUT-FEL 2019, 51 s.
- Šusta, R.: [Circuit Design with VHDL modeling styles "dataflow" and "structural"](#) - english, ČVUT-FEL 2019, 83 s.

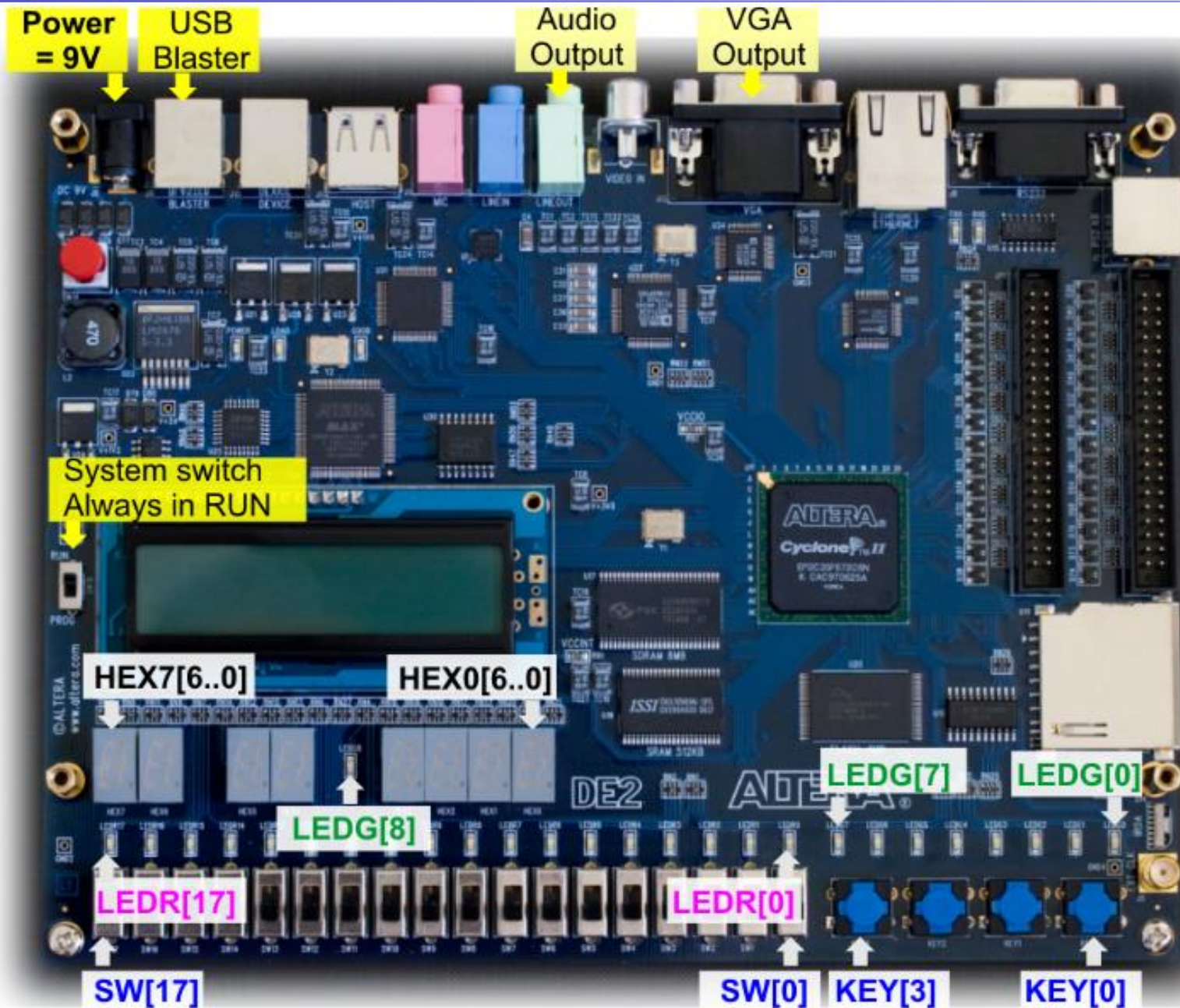
<https://dcenet.felk.cvut.cz/fpga/> -> Library (**login Felld**)

- Enoch O. Hwang: Digital Logic and Microprocessor Design with VHDL, Electronix 2004, 513 s.

*FPGA teaching began at FEE in 2009 and has undergone a number of innovations. -> You will find a number of guides and study materials on LSP websites. The list above contains only the most important ones.*





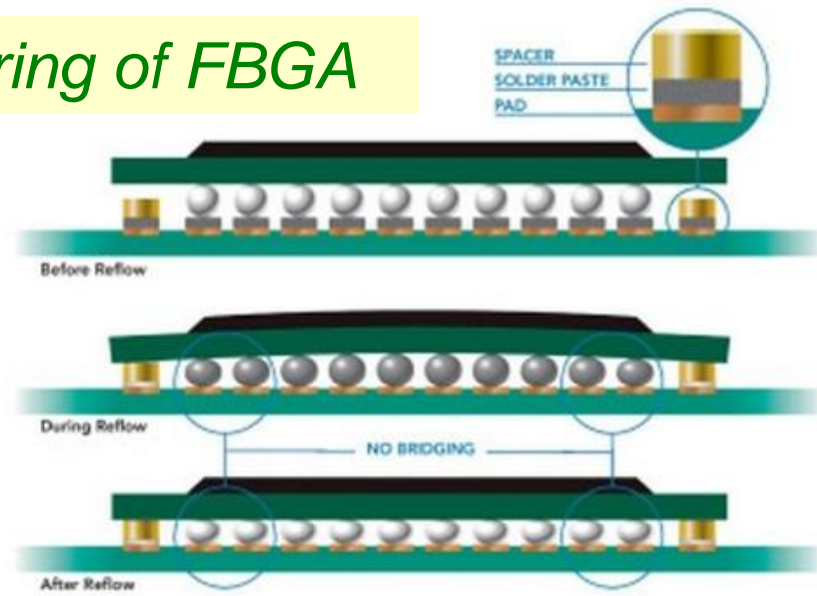
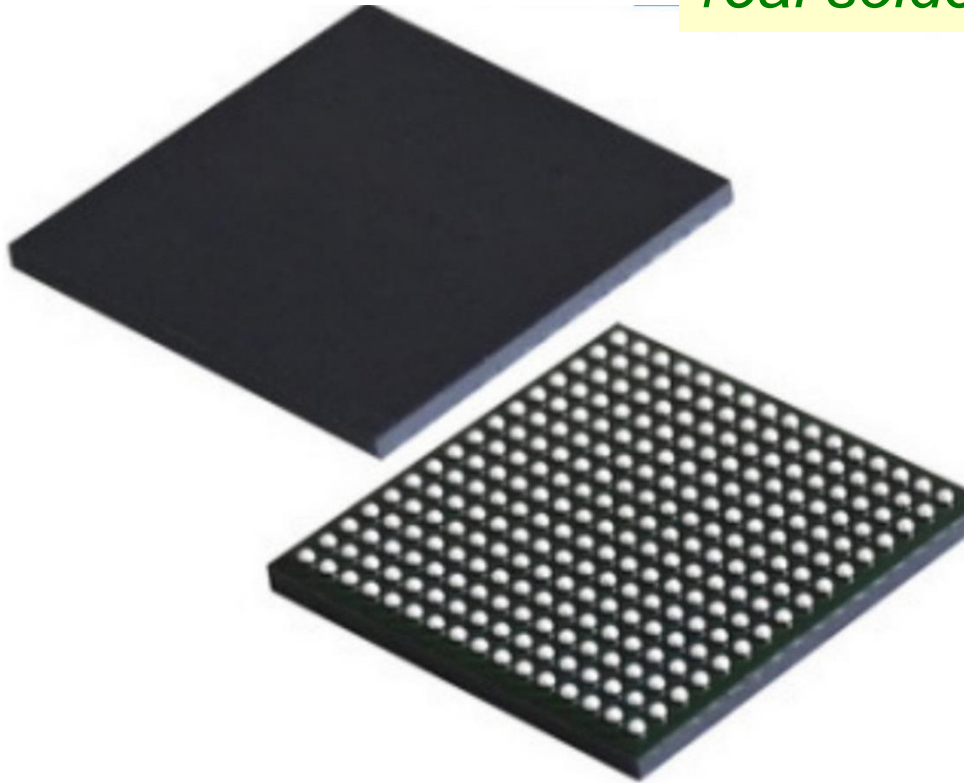


**FPGA**  
**Field**  
**Programmable**  
**Gate**  
**Array**

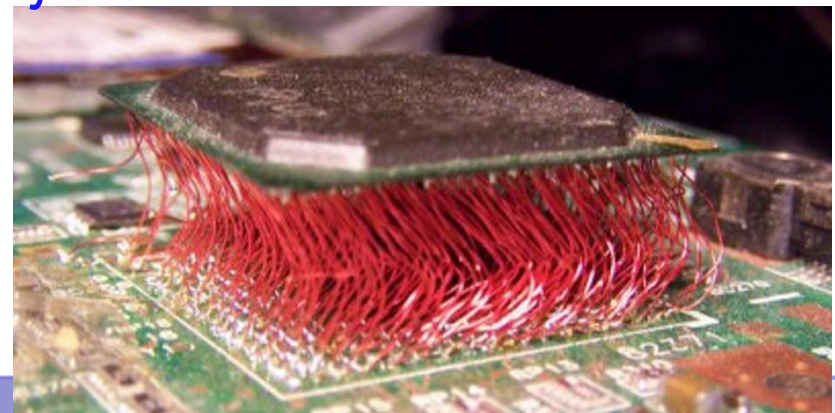


# package FBGA - Fine Ball Grid Array

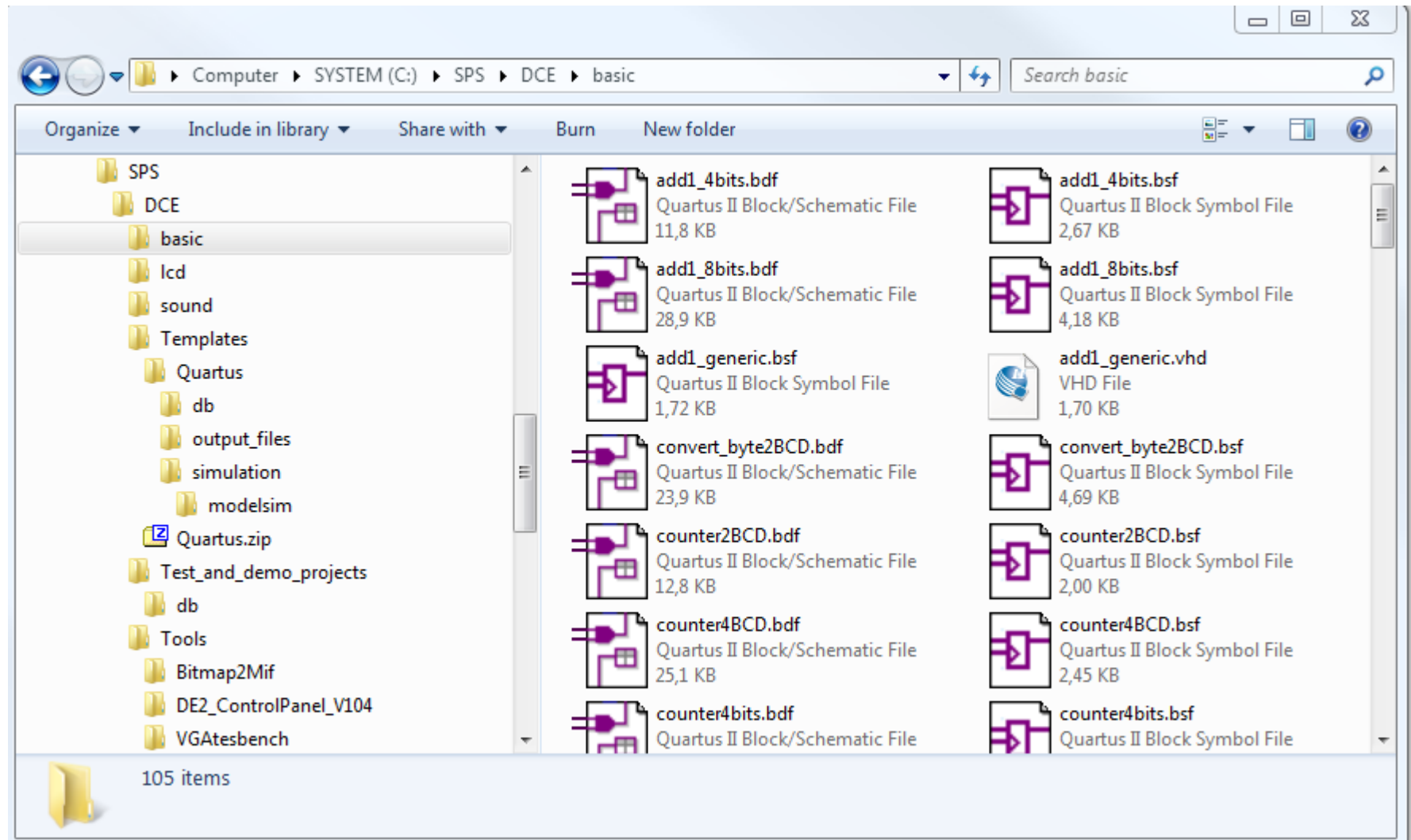
*real soldering of FBGA*



*joke how to solder FBGA*







[http://dcenet.felk.cvut.cz/edu/fpga/install/DCE\\_Libraries.zip](http://dcenet.felk.cvut.cz/edu/fpga/install/DCE_Libraries.zip)